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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,375	02/13/2006	David A. Mendels	78104089/N16948	4639

25005 7590 07/15/2008

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EXAMINER	
WALSH, DANIEL I	

ART UNIT	PAPER NUMBER
2887	

MAIL DATE	DELIVERY MODE
07/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,375	MENDELS, DAVID A.	
	Examiner	Art Unit	
	DANIEL WALSH	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 16-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 16-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4-29-05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Shoobridge (US 7,185,816).

Re claim 1, Shoobridge teaches an identification device in a single coded layer, first, second, and third machine readable identification codes arranged along length, width and height dimensional axes each provided with coding elements extending along their respective dimensional axes (abstract, which teaches encoding of colors/gray can encode information in a 3rd dimension, on a 2d barcode).

Re claim 2, the codes are interpreted as substantially orthogonal to each other.

2. Claims 1, 2, 8-9, and 21-22 rejected under 35 U.S.C. 102(e) as being anticipated by Depta (US 2004/0245343).

Re claim 1, Depta teaches the limitations of claim 1 (paragraph [0008]), though a 1d/2d barcode encoded in 3 dimensions (the third being the height).

Re claim 2, as discussed above, the directions are orthogonal.

Re claims 8-9, Depta teaches invisible (only luminesce during excitation (paragraphs [0010] and [0014]), and that the third code (height dimensions) is physically different. This is interpreted as invisible.

Re claims 21-22, the limitations have been discussed above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3-13 and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge, as discussed above.

Re claims 3-4, the teachings of Shoobridge have been discussed above.

Shoobridge is silent to a fourth code as claimed.

However, the Examiner notes that it is well known and conventional in the art to have varying widths of code elements, to encode data. Re claims 3-4, based on the claim language, the Examiner has interpreted that 2 or more individual bar code elements can read upon the claimed identification code, since the claims only require each identification code to have a plurality of elements (at least two). Therefore, any collection of at least 2 coding elements can

be interpreted as an identification code (such as 2 bars, or 3 bars, etc). As Shoobridge teaches 2d barcodes with a 3rd dimension encoded in color, it would have been obvious that a collection of at least 2 individual elements of the barcode of Shoobridge can be interpreted as one of the claimed identification code, and hence Shoobridge can have at least 4 identification codes and even more, based on what data is being encoded. Simply put, a pair of barcode elements of Shoobridge can read on the claimed identification code. It would have been obvious to one of ordinary skill in the art to have 4 or more pairs of such barcode elements, based on what is being encoded data wise, still noting that it would have been obvious to have at least 4 pairs of elements in order to encode data, as 2d barcodes are known to encode more data than 1d barcode, for example. As Shoobridge teaches different colors, that can be interpreted as the different physical characteristic.

Re claims 5-7, the teachings of Shoobridge have been discussed above.

Re claims 5-7 though silent to dimensions, the Examiner notes that it would have been obvious to one of ordinary skill in the art that dimensions can be expressed in the order of micrometers in one direction, or in the order of various different metrics (millimeters, centimeters, meters, etc). For example, 1 meter can be expressed as 100cm or 1000 mm, etc. Further, it is known in the art that pixels for 2d barcodes, such as pdf-417, have pixel sizes in the micron order range. Finally, the Examiner notes that one can express a measurement in different units as a matter of design choice, for example.

Re claims 8 and 9, the teachings of Shoobridge have been discussed above.

Shoobridge is silent to the codes not being visible to the naked eye.

However, the Examiner notes that the claims do not recite at what distance the codes are not visible, or even if there is a physical structure or limitation that renders them invisible. Therefore, the Examiner notes it would have been obvious to one of ordinary skill in the art, that when placed far enough from a user, the device would not be visible. The limitations do not recite a constraint on the structure as they merely say the device is not visible to the naked eye, but do not provide a reference as to how far it is from the eye. Therefore one can interpret the device to be invisible to the naked eye, when placed far away.

Re claim 10, the limitations have been discussed above.

Though silent to the device being on an exterior surface of an item, the Examiner notes it would have been obvious to do so, as is conventional in the art, to provide information in a machine readable format about the item, for ease of use and reliability.

Re claims 11-13, the limitations have been discussed above.

Re claim 16, though silent to a reading device, the Examiner notes that barcode readers are well known and conventional in the art (CCD based, for example), that locating the code on an article and read the code. Such a conventional device is interpreted as functionally equivalent to that claimed of the reading means, locating means, control means, and micro-computerized measuring machine, since conventional CCD based barcode readers are controlled by a processor, can locate codes on devices/articles, and are small and compact to be considered micro computerized measuring machines, since such a phrase has not been explicitly defined in the claims to preclude a CCD based barcode reader.

Re claims 17-20, the Examiner notes that such limitations are drawn to the intended use of the device. It has been held that a recitation with respect to the manner in which a claimed

apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ2d 1647 (1987). It would have been obvious to use such a device for items, to provide machine readable information (for reliability, accuracy, security, etc.).

Re claim 21, the limitations have been discussed above. As the barcodes can be on the outside, they are understood to protrude and be arrayed along the article.

Re claim 22, the Examiner notes that the barcode elements vary in one or more of spacing, height/length/width dimensions, as is conventional in the art, for how barcodes are encoded/formed, as a property of barcodes, conventional in the art.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge, as discussed above, in view of Chen et al. EP000561334A2).

The teachings of Shoobridge have been discussed above.

Shoobridge is silent to the reader as claimed.

Chen et al. teaches such limitations (FIG. 3 and abstract, which teaches a picture is taken, there is a CCD, a barcode is located and verified). It is obvious that a processor/controller is present in order to process data for reading.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Shoobridge with those of Chen et al.

One would have been motivated to do this to have an accurate, low cost, and low complexity means of machine reading.

6. Claims 3, 5-13 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Depta, as discussed above.

Re claim 3, the teachings of Depta have been discussed above.

Depta is silent to a fourth code as claimed.

However, the Examiner notes that it is well known and conventional in the art to have varying widths of code elements, to encode data. Re claims 3, based on the claim language, the Examiner has interpreted that 2 or more individual bar code elements can read upon the claimed identification code, since the claims only require each identification code to have a plurality of elements (at least two). Therefore, any collection of at least 2 coding elements can be interpreted as an identification code (such as 2 bars, or 3 bars, etc). As Depta teaches 1d and 2d barcodes, it would have been obvious that a collection of at least 2 individual elements of the barcode of Depta can be interpreted as one of the claimed identification code, and hence Depta can be interpreted as having at least 4 identification codes and even more, based on what data is being encoded. Simply put, a pair of barcode elements of Depta can read on the claimed identification code. It would have been obvious to one of ordinary skill in the art to have 4 or more pairs of such barcode elements, based on what is being encoded data wise, still noting that it would have been obvious to have at least 4 pairs of elements in order to encode data, as 2d barcodes are known to encode more data than 1d/2d barcode, for example. Further, Depta teaches a fourth characteristic width a different physical characteristic (length, width and spacing (paragraph [0008]), which has a different characteristic when read, for example.

Re claims 5-7, the teachings of Depta have been discussed above.

Re claims 5-7 though silent to dimensions, the Examiner notes that it would have been obvious to one of ordinary skill in the art that dimensions can be expressed in the order of micrometers in one direction, or in the order of various different metrics (millimeters,

centimeters, meters, etc). For example, 1 meter can be expressed as 100cm or 1000 mm, etc. Further, it is known in the art that pixels for 2d barcodes, such as pdf-417, have pixel sizes in the micron order range. Finally, the Examiner notes that one can express a measurement in different units as a matter of design choice, for example.

Re claims 8 and 9, the teachings of Depta have been discussed above.

Shoobridge is silent to explicitly saying the codes not being visible to the naked eye.

However, the Examiner notes Depta teaches fluorescent/luminescent materials that are possibly invisible and only luminese when illuminated, and hence is interpreted as invisible.

Further, the claims do not recite at what distance the codes are not visible, or even if there is a physical structure or limitation that renders them invisible. Therefore, the Examiner notes it would have been obvious to one of ordinary skill in the art, that when placed far enough from a user, the device would not be visible. The limitations do not recite a constraint on the structure as they merely say the device is not visible to the naked eye, but do not provide a reference as to how far it is from the eye. Therefore one can interpret the device to be invisible to the naked eye, when placed far away. Further, as Depta teaches mm, this can be invisible if far enough away.

Re claim 10, the limitations have been discussed above. Depta teaches the code on outside of an item (abstract).

Re claims 11-13, the limitations have been discussed above.

Re claim 16, though silent to the reading device as claimed, the Examiner notes that barcode readers are well known and conventional in the art (CCD based, for example), that locating the code on an article and read the code. Such a conventional device is interpreted as

functionally equivalent to that claimed of the reading means, locating means, control means, and micro-computerized measuring machine, since conventional CCD based barcode readers are controlled by a processor, can locate codes on devices/articles, and are small and compact to be considered micro computerized measuring machines, since such a phrase has not been explicitly defined in the claims to preclude a CCD based barcode reader.

Re claims 17-20, the Examiner notes that such limitations are drawn to the intended use of the device. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ2d 1647 (1987). It would have been obvious to use such a device for items, to provide machine readable information (for reliability, accuracy, security, etc.). Nonetheless, Depta teaches documents and other notes (abstract).

Re claim 21, the limitations have been discussed above. As the barcodes can be on the outside, they are understood to protrude and be arrayed along the article (FIG. 3).

Re claim 22, the Examiner notes that the barcode elements vary in one or more of spacing, height/length/width dimensions, as is conventional in the art, for how barcodes are encoded/formed, as a property of barcodes, conventional in the art.

7. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Depta, as discussed above, in view of Shoobridge, as discussed above.

The teachings of Depta have been discussed above.

Depta is silent to the characteristics as claimed.

Shoobridge teaches such limitations (color).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Depta with those of Shoobridge.

One would have been motivated to do this to have additional encoding capacity.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (See PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL WALSH whose telephone number is (571)272-2409. The examiner can normally be reached on M-F 9am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL WALSH/
Primary Examiner, Art Unit 2887

Re claim3-4 object, object